



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Translation

Applicant's or agent's file reference 8399 WO F RO-FRI	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/009373	International filing date (day/month/year) 23 August 2003 (23.08.2003)	Priority date (day/month/year) 28 August 2002 (28.08.2002)
International Patent Classification (IPC) or national classification and IPC F16H 3/091		
Applicant ZF FRIEDRICHSHAFEN AG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
- ☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:

- I. ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 06 February 2004 (06.02.2004)	Date of completion of this report 07 December 2004 (07.12.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/009373

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages 1-6, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the claims:
pages _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages 1, 2, filed with the letter of 29 November 2004 (29.11.2004)
- ☒ the drawings:
pages 1/2-2/2, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/09373

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1, 2	YES
	Claims		NO
Inventive step (IS)	Claims	1, 2	YES
	Claims		NO
Industrial applicability (IA)	Claims	1, 2	YES
	Claims		NO

2. Citations and explanations

Reference is made to the following document:

D1: DE 100 51 354 A (Daimler Chrysler AG)

NOVELTY

Claim 1

Document D1 discloses the following (the references in parentheses are to D1):

a gearbox for a motor vehicle, comprising an input shaft (1), an output shaft (3), a layshaft (2) and a downstream range change group (12), wherein the gearbox has at least one direct gear and the direct gear components which are not involved in the power flow can be disengaged.

In the direct gear the ring gear 20 is rotationally fixed to the output shaft 8 and to the planet carrier via the synchronising device 22.

The subject matter of claim 1 of the present application differs in that the input for the downstream range change group can be connected directly to the output for the downstream range change group.

The subject matter of claim 1 is novel because none of the documents cited in the international search report disclose all the features of such a gearbox.

INVENTIVE STEP

Claim 1

None of the documents cited in the international search report contain anything that would prompt a person skilled in the art to design a direct gear in which the downstream range change group input is directly connected to the downstream range change group output. The subject matter of claim 1 therefore appears to involve an inventive step.

INDUSTRIAL APPLICABILITY

The invention is industrially applicable (PCT Article 33(4)) because it can be manufactured.

Dependent claim 2

The features of dependent claim 2 relate to a special development of the gearbox according to claim 1. Claim 2 therefore also meets the requirements of PCT Article 33.

Further observations

Claim 1 is not correctly delimited against document D1 because the features relating to the range change group and the disengagement of the direct gear components which are not involved in the power flow are already known from D1, and yet they are specified in the characterising part of the claim instead of in the preamble.